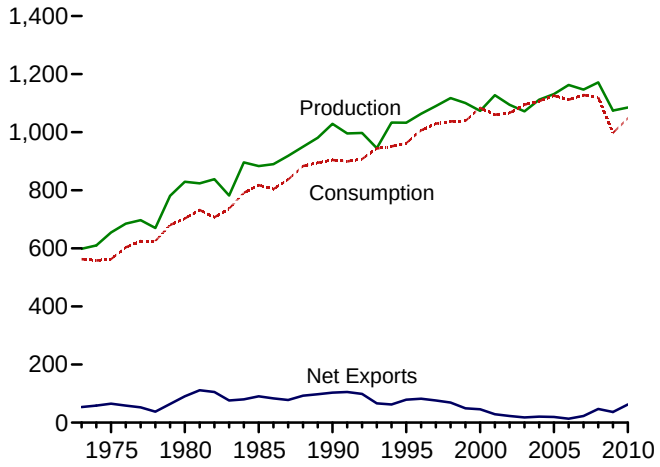
6 Coal

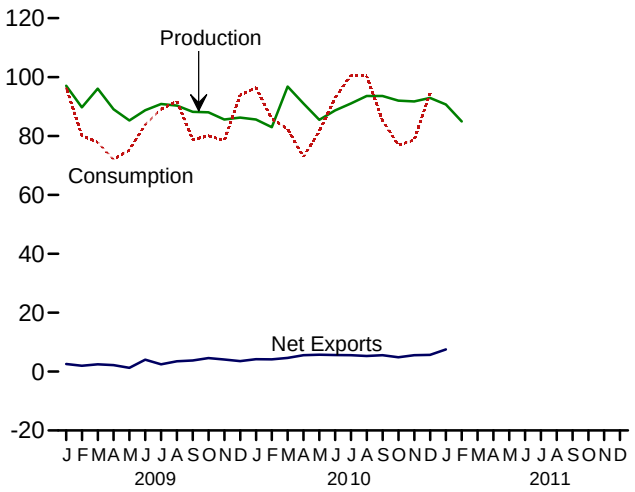
Coal yard, Curtis Bay, Maryland. Source: U.S. Department of Energy.

Figure 6.1 Coal
(Million Short Tons)

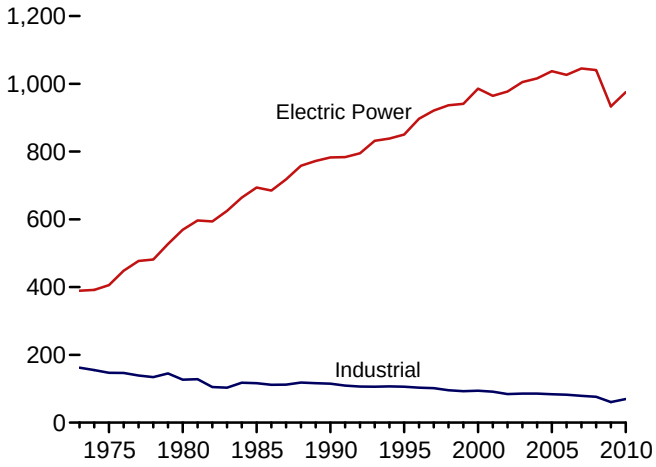
Overview, 1973-2010



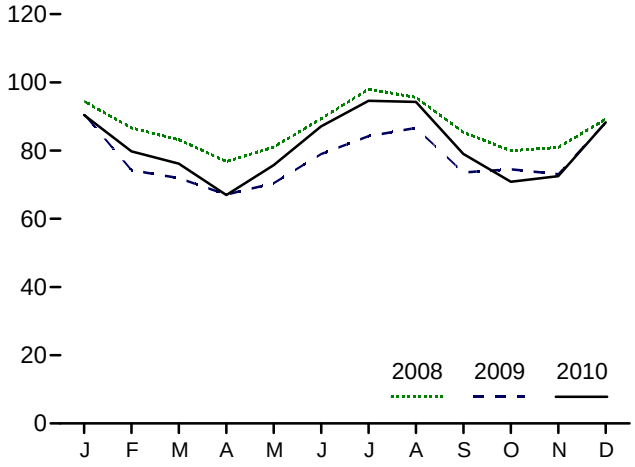
Overview, Monthly



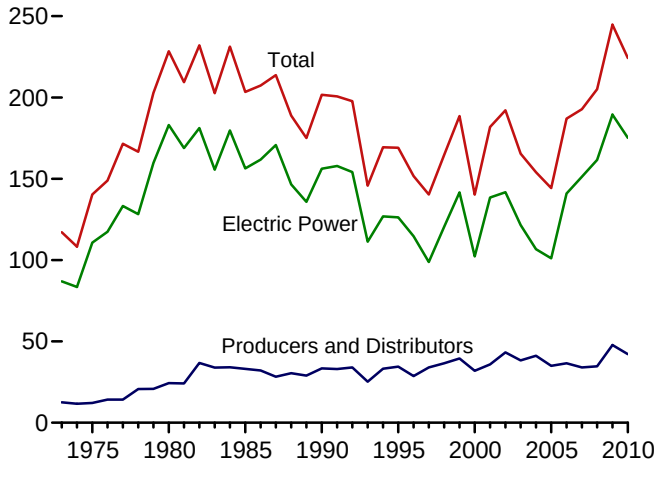
Consumption by Sector, 1973-2010



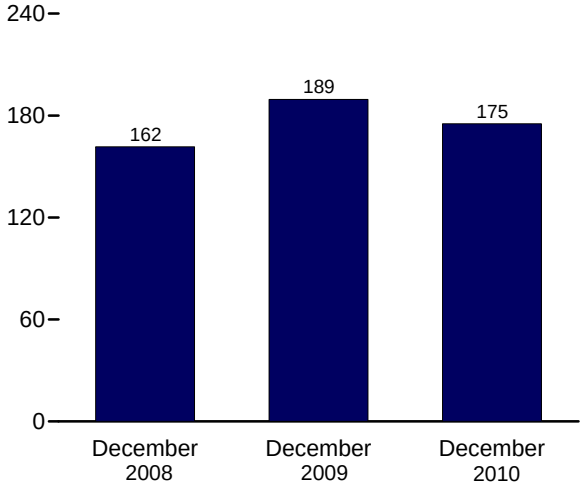
Electric Power Sector Consumption, Monthly



Stocks, End of Year, 1973-2010



Electric Power Sector Stocks, End of Month



Web Page: http://www.eia.gov/mer/coal.html.
Sources: Tables 6.1–6.3.

Table 6.1 Coal Overview

(Thousand Short Tons)

	Production[a]	Waste Coal Supplied[b]	Trade			Stock Change[d]	Losses and Unaccounted for[e]	Consumption
			Imports	Exports	Net Imports[c]			
1973 Total	**598,568**	**NA**	**127**	**53,587**	**-53,460**	**(f)**	**f -17,476**	**562,584**
1975 Total	**654,641**	**NA**	**940**	**66,309**	**-65,369**	**32,154**	**-5,522**	**562,640**
1980 Total	**829,700**	**NA**	**1,194**	**91,742**	**-90,548**	**25,595**	**10,827**	**702,730**
1985 Total	**883,638**	**NA**	**1,952**	**92,680**	**-90,727**	**-27,934**	**2,796**	**818,049**
1990 Total	**1,029,076**	**3,339**	**2,699**	**105,804**	**-103,104**	**26,542**	**-1,730**	**904,498**
1995 Total	**1,032,974**	**8,561**	**9,473**	**88,547**	**-79,074**	**-275**	**632**	**962,104**
1996 Total	**1,063,856**	**8,778**	**8,115**	**90,473**	**-82,357**	**-17,456**	**1,411**	**1,006,321**
1997 Total	**1,089,932**	**8,096**	**7,487**	**83,545**	**-76,058**	**-11,253**	**3,678**	**1,029,544**
1998 Total	**1,117,535**	**8,690**	**8,724**	**78,048**	**-69,324**	**24,228**	**-4,430**	**1,037,103**
1999 Total	**1,100,431**	**8,683**	**9,089**	**58,476**	**-49,387**	**23,988**	**-2,906**	**1,038,647**
2000 Total	**1,073,612**	**9,089**	**12,513**	**58,489**	**-45,976**	**-48,309**	**938**	**1,084,095**
2001 Total	**1,127,689**	**10,085**	**19,787**	**48,666**	**-28,879**	**41,630**	**7,120**	**1,060,146**
2002 Total	**1,094,283**	**9,052**	**16,875**	**39,601**	**-22,726**	**10,215**	**4,040**	**1,066,355**
2003 Total	**1,071,753**	**10,016**	**25,044**	**43,014**	**-17,970**	**-26,659**	**-4,403**	**1,094,861**
2004 Total	**1,112,099**	**11,299**	**27,280**	**47,998**	**-20,718**	**-11,462**	**6,887**	**1,107,255**
2005 Total	**1,131,498**	**13,352**	**30,460**	**49,942**	**-19,482**	**-9,702**	**9,092**	**1,125,978**
2006 Total	**1,162,750**	**14,409**	**36,246**	**49,647**	**-13,401**	**42,642**	**8,824**	**1,112,292**
2007 Total	**1,146,635**	**14,076**	**36,347**	**59,163**	**-22,816**	**5,812**	**4,085**	**1,127,998**
2008 Total	**1,171,809**	**14,146**	**34,208**	**81,519**	**-47,311**	**12,354**	**5,740**	**1,120,548**
2009 January	97,022	1,272	2,329	4,907	-2,578	-2,104	1,370	96,449
February	89,688	928	1,855	3,822	-1,968	7,901	626	80,121
March	96,062	1,121	2,141	4,605	-2,464	12,517	4,389	77,814
April	89,072	1,036	1,303	3,513	-2,210	13,303	2,577	72,019
May	85,236	1,065	2,283	3,552	-1,269	7,537	2,231	75,264
June	88,708	1,118	1,840	5,886	-4,045	2,746	-792	83,827
July	90,847	1,248	2,018	4,477	-2,459	-781	1,282	89,134
August	90,308	1,206	1,568	5,056	-3,488	-4,988	1,282	91,731
September	88,185	1,113	1,854	5,625	-3,771	4,868	1,902	78,757
October	88,002	1,142	1,762	6,364	-4,603	4,561	-54	80,035
November	85,564	1,164	1,506	5,586	-4,080	2,724	1,423	78,502
December	86,229	1,252	2,179	5,703	-3,524	-8,617	-1,252	93,826
Total	**1,074,923**	**13,666**	**22,639**	**59,097**	**-36,458**	**39,668**	**14,985**	**997,478**
2010 January	85,589	1,201	1,665	5,866	-4,202	R -10,728	R -3,065	R 96,381
February	82,968	903	1,239	5,386	-4,146	R -7,969	R 1,897	R 85,796
March	96,760	1,165	1,899	6,554	-4,655	R 8,047	R 2,819	R 82,404
April	91,010	1,087	1,812	7,358	-5,545	R 12,072	R 1,634	R 72,845
May	85,456	1,163	1,475	7,220	-5,745	R 1,911	R -2,649	R 81,612
June	88,666	1,193	1,771	7,387	-5,616	R -11,636	R 2,917	R 92,962
July	91,020	1,288	1,390	6,928	-5,539	R -15,359	R 1,547	R 100,581
August	93,587	1,295	1,702	7,001	-5,299	R -8,656	R -2,132	R 100,372
September	93,597	1,138	1,588	7,145	-5,556	R -335	R 4,319	R 85,195
October	R 91,977	R 1,116	1,775	6,623	-4,849	R 13,664	R -2,323	R 76,904
November	R 91,708	R 1,088	1,473	7,015	-5,542	R 4,715	R 3,915	R 78,624
December	R 92,942	R 1,225	1,563	7,232	-5,669	R -6,190	R 69	R 94,620
Total	**R 1,085,281**	**R 13,862**	**19,353**	**81,716**	**-62,363**	**R -20,465**	**R 8,950**	**R 1,048,295**
2011 January	90,669	NA	R 1,014	R 8,509	R -7,496	NA	NA	NA
February	84,934	NA	NA	NA	NA	NA	NA	NA
2-Month Total	**175,604**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
2010 2-Month Total	**168,557**	**2,104**	**2,904**	**11,252**	**-8,348**	**-18,697**	**-1,168**	**182,177**
2009 2-Month Total	**186,710**	**2,199**	**4,184**	**8,730**	**-4,546**	**5,797**	**1,997**	**176,569**

[a] Beginning in 2001, includes a small amount of refuse recovery (coal recaptured from a refuse mine and cleaned to reduce the concentration of noncombustible materials).

[b] Waste coal (including fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and industrial sectors. Beginning in 1989, waste coal supplied is counted as a supply-side item to balance the same amount of waste coal included in "Consumption."

[c] Net imports equal imports minus exports. A minus sign indicates exports are greater than imports.

[d] A negative value indicates a decrease in stocks; a positive value indicates an increase.

[e] "Losses and Unaccounted for" is calculated as the sum of production, imports, and waste coal supplied, minus exports, stock change, and consumption.

[f] In 1973, stock change is included in "Losses and Unaccounted for."

R=Revised. NA=Not available.

Notes: • For methodology used to calculate production, consumption, and stocks, see Note 1, "Coal Production," Note 2, "Coal Consumption," and Note 3, "Coal Stocks," at end of section. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/mer/coal.html for all available data beginning in 1973.

Sources: See end of section.

Table 6.2 Coal Consumption by Sector

(Thousand Short Tons)

	End-Use Sectors											
		Commercial			Industrial							
						Other Industrial						
	Residential	CHP[a]	Other[b]	Total	Coke Plants	CHP[c]	Non-CHP[d]	Total	Total	Transportation	Electric Power Sector[e,f]	Total
1973 Total	**4,113**	**(g)**	**7,004**	**7,004**	**94,101**	**(h)**	**68,038**	**68,038**	**162,139**	**116**	**389,212**	**562,584**
1975 Total	**2,823**	**(g)**	**6,587**	**6,587**	**83,598**	**(h)**	**63,646**	**63,646**	**147,244**	**24**	**405,962**	**562,640**
1980 Total	**1,355**	**(g)**	**5,097**	**5,097**	**66,657**	**(h)**	**60,347**	**60,347**	**127,004**	**(h)**	**569,274**	**702,730**
1985 Total	**1,711**	**(g)**	**6,068**	**6,068**	**41,056**	**(h)**	**75,372**	**75,372**	**116,429**	**(h)**	**693,841**	**818,049**
1990 Total	**1,345**	**1,191**	**4,189**	**5,379**	**38,877**	**27,781**	**48,549**	**76,330**	**115,207**	**(h)**	**782,567**	**904,498**
1995 Total	**755**	**1,419**	**3,633**	**5,052**	**33,011**	**29,363**	**43,693**	**73,055**	**106,067**	**(h)**	**850,230**	**962,104**
1996 Total	**721**	**1,660**	**3,625**	**5,285**	**31,706**	**29,434**	**42,254**	**71,689**	**103,395**	**(h)**	**896,921**	**1,006,321**
1997 Total	**711**	**1,738**	**4,015**	**5,752**	**30,203**	**29,853**	**41,661**	**71,515**	**101,718**	**(h)**	**921,364**	**1,029,544**
1998 Total	**534**	**1,443**	**2,879**	**4,322**	**28,189**	**28,553**	**38,887**	**67,439**	**95,628**	**(h)**	**936,619**	**1,037,103**
1999 Total	**585**	**1,490**	**2,803**	**4,293**	**28,108**	**27,763**	**36,975**	**64,738**	**92,846**	**(h)**	**940,922**	**1,038,647**
2000 Total	**454**	**1,547**	**2,126**	**3,673**	**28,939**	**28,031**	**37,177**	**65,208**	**94,147**	**(h)**	**985,821**	**1,084,095**
2001 Total	**481**	**1,448**	**2,441**	**3,888**	**26,075**	**25,755**	**39,514**	**65,268**	**91,344**	**(h)**	**964,433**	**1,060,146**
2002 Total	**533**	**1,405**	**2,506**	**3,912**	**23,656**	**26,232**	**34,515**	**60,747**	**84,403**	**(h)**	**977,507**	**1,066,355**
2003 Total	**551**	**1,816**	**1,869**	**3,685**	**24,248**	**24,846**	**36,415**	**61,261**	**85,509**	**(h)**	**1,005,116**	**1,094,861**
2004 Total	**512**	**1,917**	**2,693**	**4,610**	**23,670**	**26,613**	**35,582**	**62,195**	**85,865**	**(h)**	**1,016,268**	**1,107,255**
2005 Total	**378**	**1,922**	**2,420**	**4,342**	**23,434**	**25,875**	**34,465**	**60,340**	**83,774**	**(h)**	**1,037,485**	**1,125,978**
2006 Total	**290**	**1,886**	**1,050**	**2,936**	**22,957**	**25,262**	**34,210**	**59,472**	**82,429**	**(h)**	**1,026,636**	**1,112,292**
2007 Total	**353**	**1,927**	**1,247**	**3,173**	**22,715**	**22,537**	**34,078**	**56,615**	**79,331**	**(h)**	**1,045,141**	**1,127,998**
2008 January	40	197	159	356	1,834	1,954	2,746	4,700	6,534	(h)	94,459	101,389
February	36	181	146	327	1,792	1,850	2,811	4,661	6,452	(h)	86,626	93,442
March	35	176	142	317	1,910	1,879	2,797	4,676	6,586	(h)	83,215	90,154
April	23	144	63	207	1,864	1,803	2,812	4,615	6,478	(h)	76,753	83,462
May	23	145	64	208	1,911	1,857	2,751	4,609	6,520	(h)	81,056	87,807
June	28	177	78	255	1,805	1,772	2,828	4,600	6,406	(h)	89,347	96,036
July	25	169	53	222	1,915	1,871	2,659	4,530	6,445	(h)	98,032	104,724
August	25	168	53	221	2,034	1,841	2,680	4,521	6,555	(h)	95,590	102,390
September	23	155	49	203	1,818	1,783	2,706	4,489	6,307	(h)	85,376	91,909
October	27	150	96	246	2,208	1,787	2,676	4,463	6,671	(h)	79,982	86,927
November	30	166	107	272	1,626	1,721	2,616	4,337	5,963	(h)	80,883	87,149
December	36	195	125	320	1,353	1,784	2,409	4,194	5,547	(h)	89,259	95,162
Total	**351**	**2,021**	**1,134**	**3,155**	**22,070**	**21,902**	**32,491**	**54,393**	**76,463**	**(h)**	**1,040,580**	**1,120,548**
2009 January	40	208	152	360	1,390	1,793	2,225	4,018	5,409	(h)	90,640	96,449
February	34	178	130	308	1,449	1,605	2,470	4,075	5,524	(h)	74,254	80,121
March	33	170	123	293	1,559	1,692	2,289	3,981	5,540	(h)	71,948	77,814
April	22	128	73	201	1,150	1,487	2,036	3,522	4,673	(h)	67,123	72,019
May	20	117	67	183	1,118	1,550	1,967	3,517	4,635	(h)	70,425	75,264
June	24	135	78	213	1,134	1,600	1,903	3,503	4,637	(h)	78,954	83,827
July	21	137	51	188	1,032	1,659	1,991	3,650	4,682	(h)	84,243	89,134
August	22	143	53	196	1,168	1,694	2,017	3,710	4,878	(h)	86,635	91,731
September	19	127	47	174	1,250	1,611	2,136	3,747	4,997	(h)	73,566	78,757
October	24	129	90	219	1,431	1,671	2,170	3,841	5,272	(h)	74,520	80,035
November	29	151	106	257	1,274	1,622	2,257	3,878	5,153	(h)	73,063	78,502
December	33	174	122	296	1,371	1,783	2,088	3,871	5,242	(h)	88,255	93,826
Total	**321**	**1,798**	**1,091**	**2,889**	**15,326**	**19,766**	**25,549**	**45,314**	**60,641**	**(h)**	**933,627**	**997,478**
2010 January	39	195	154	349	1,472	2,051	R 2,053	R 4,104	R 5,576	(h)	90,418	R 96,381
February	34	170	135	305	1,584	1,947	R 2,171	R 4,118	R 5,703	(h)	79,754	R 85,796
March	31	156	123	279	1,801	2,079	R 2,075	R 4,155	R 5,955	(h)	76,139	R 82,404
April	20	126	51	177	1,786	1,659	R 2,227	R 3,886	R 5,672	(h)	66,976	R 72,845
May	19	125	51	175	1,794	1,929	R 1,973	R 3,902	R 5,696	(h)	75,721	R 81,612
June	22	138	56	194	1,772	1,930	R 1,946	R 3,876	R 5,648	(h)	87,097	R 92,962
July	21	143	R 45	R 188	1,783	2,092	R 1,922	R 4,014	R 5,797	(h)	94,576	R 100,581
August	23	156	48	R 204	1,814	2,163	R 1,887	R 4,050	R 5,864	(h)	94,281	R 100,372
September	21	142	44	R 186	1,894	1,907	R 2,155	R 4,062	R 5,956	(h)	79,032	R 85,195
October	R 24	132	R 83	R 216	R 1,731	1,887	R 2,209	R 4,096	R 5,826	(h)	70,838	R 76,904
November	R 25	136	R 86	R 222	R 1,787	1,776	R 2,335	R 4,111	R 5,898	(h)	72,479	R 78,624
December	31	169	107	276	1,874	2,161	2,002	4,163	6,036	(h)	88,277	94,620
Total	**308**	**1,787**	**985**	**2,772**	**21,092**	**23,581**	**24,955**	**48,535**	**69,628**	**(h)**	**975,588**	**R 1,048,295**

[a] Commercial combined-heat-and-power (CHP) and a small number of commercial electricity-only plants, such as those at hospitals and universities. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

[b] All commercial sector fuel use other than that in "Commercial CHP."

[c] Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

[d] All industrial sector fuel use other than that in "Coke Plants" and "Industrial CHP."

[e] The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

[f] Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers.

[g] Included in "Commercial Other."

[h] Included in "Industrial Non-CHP."

R=Revised.

Notes: • CHP monthly values are from Table 7.4c; electric power sector monthly values are from Table 7.4b; all other monthly values are estimates derived from collected quarterly and annual data. See Note 2, "Coal Consumption," at end of section. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/mer/coal.html for all available data beginning in 1973.

Sources: See end of section.

Table 6.3 Coal Stocks by Sector

(Thousand Short Tons)

	Producers and Distributors	End-Use Sectors					Electric Power Sector[b,c]	Total
		Residential and Commercial	Industrial			Total		
			Coke Plants	Other[a]	Total			
1973 Year	**12,530**	**290**	**6,998**	**10,370**	**17,368**	**17,658**	**86,967**	**117,155**
1975 Year	**12,108**	**233**	**8,797**	**8,529**	**17,326**	**17,559**	**110,724**	**140,391**
1980 Year	**24,379**	**NA**	**9,067**	**11,951**	**21,018**	**21,018**	**183,010**	**228,407**
1985 Year	**33,133**	**NA**	**3,420**	**10,438**	**13,857**	**13,857**	**156,376**	**203,367**
1990 Year	**33,418**	**NA**	**3,329**	**8,716**	**12,044**	**12,044**	**156,166**	**201,629**
1995 Year	**34,444**	**NA**	**2,632**	**5,702**	**8,334**	**8,334**	**126,304**	**169,083**
1996 Year	**28,648**	**NA**	**2,667**	**5,688**	**8,355**	**8,355**	**114,623**	**151,627**
1997 Year	**33,973**	**NA**	**1,978**	**5,597**	**7,576**	**7,576**	**98,826**	**140,374**
1998 Year	**36,530**	**NA**	**2,026**	**5,545**	**7,571**	**7,571**	**120,501**	**164,602**
1999 Year	**39,475**	**NA**	**1,943**	**5,569**	**7,511**	**7,511**	**[c] 141,604**	**188,590**
2000 Year	**31,905**	**NA**	**1,494**	**4,587**	**6,081**	**6,081**	**102,296**	**140,282**
2001 Year	**35,900**	**NA**	**1,510**	**6,006**	**7,516**	**7,516**	**138,496**	**181,912**
2002 Year	**43,257**	**NA**	**1,364**	**5,792**	**7,156**	**7,156**	**141,714**	**192,127**
2003 Year	**38,277**	**NA**	**905**	**4,718**	**5,623**	**5,623**	**121,567**	**165,468**
2004 Year	**41,151**	**NA**	**1,344**	**4,842**	**6,186**	**6,186**	**106,669**	**154,006**
2005 Year	**34,971**	**NA**	**2,615**	**5,582**	**8,196**	**8,196**	**101,137**	**144,304**
2006 Year	**36,548**	**NA**	**2,928**	**6,506**	**9,434**	**9,434**	**140,964**	**186,946**
2007 Year	**33,977**	**NA**	**1,936**	**5,624**	**7,560**	**7,560**	**151,221**	**192,758**
2008 January	34,252	F 467	1,778	5,355	7,133	7,600	146,973	188,825
February	35,114	F 453	1,620	5,087	6,707	7,159	142,782	185,055
March	34,876	448	1,462	4,818	6,280	6,728	146,497	188,101
April	36,494	458	1,560	4,873	6,433	6,891	154,029	197,414
May	34,223	468	1,658	4,928	6,586	7,055	159,408	200,686
June	32,086	478	1,756	4,983	6,740	7,218	152,542	191,846
July	31,693	490	1,828	5,058	6,886	7,376	142,572	181,642
August	30,017	502	1,899	5,133	7,033	7,535	139,352	176,904
September	31,354	514	1,971	5,208	7,179	7,693	143,903	182,950
October	32,444	508	2,091	5,475	7,565	8,074	155,659	196,177
November	33,556	503	2,211	5,741	7,952	8,455	163,390	205,401
December	**34,688**	**498**	**2,331**	**6,007**	**8,338**	**8,836**	**161,589**	**205,112**
2009 January	38,394	490	2,260	5,788	8,049	8,539	156,075	203,008
February	42,066	483	2,190	5,570	7,760	8,243	160,601	210,909
March	41,257	475	2,119	5,352	7,471	7,946	174,223	223,426
April	43,195	477	2,000	5,266	7,266	7,744	185,790	236,729
May	41,622	480	1,880	5,181	7,061	7,541	195,103	244,266
June	44,018	482	1,760	5,096	6,856	7,338	195,656	247,012
July	45,372	496	1,702	5,099	6,800	7,297	193,563	246,232
August	42,457	510	1,644	5,101	6,745	7,255	191,532	241,244
September	41,690	524	1,585	5,104	6,690	7,214	197,208	246,112
October	43,882	526	1,683	5,106	6,789	7,314	199,477	250,673
November	42,217	527	1,780	5,108	6,888	7,415	203,765	253,397
December	**47,718**	**529**	**1,957**	**5,109**	**7,066**	**7,595**	**189,467**	**244,780**
2010 January	48,854	R 510	1,832	R 4,793	R 6,625	R 7,135	178,063	R 234,052
February	48,286	490	1,708	R 4,476	R 6,184	R 6,674	171,123	R 226,083
March	50,153	R 471	1,583	R 4,159	R 5,743	R 6,213	177,763	R 234,130
April	50,614	482	1,715	R 4,194	R 5,909	R 6,392	189,196	R 246,202
May	50,248	494	1,846	R 4,230	R 6,076	R 6,570	191,295	R 248,113
June	48,667	R 505	1,978	R 4,265	R 6,243	R 6,748	181,062	R 236,477
July	45,105	509	1,948	R 4,341	R 6,289	R 6,798	169,215	R 221,118
August	45,808	513	1,918	4,417	R 6,335	R 6,848	159,805	R 212,461
September	42,430	517	1,889	R 4,492	R 6,381	R 6,899	162,798	R 212,126
October	43,709	R 529	R 1,901	R 4,503	R 6,404	R 6,934	175,147	R 225,790
November	40,688	R 541	R 1,913	R 4,514	R 6,428	R 6,969	182,848	R 230,505
December	**42,151**	**553**	**1,925**	**4,525**	**6,451**	**7,004**	**175,160**	**224,315**

[a] Through 1977, data are for stocks held by the manufacturing and transportation sectors. Beginning in 1978, data are for stocks held at manufacturing plants only.

[b] The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

[c] Through 1998, data are for stocks at electric utilities only. Beginning in 1999, data also include stocks at independent power producers.

R=Revised. NA=Not available. F=Forecast.

Notes: • Stocks are at end of period. • Electric power sector monthly values are from Table 7.5; producers and distributors monthly values are estimates derived from collected annual data; all other monthly values are estimates derived from collected quarterly values. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/mer/coal.html for all available data beginning in 1973.

Sources: See end of section.

Coal

Note 1. Coal Production. Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the U.S. Energy Information Administration (EIA) and published in the *Weekly Coal Production* report. When a week extends into a new month, production is allocated on a daily basis and added to the appropriate month. Weekly estimates are based on Association of American Railroads (AAR) data showing the number of railcars loaded with coal during the week by Class I and certain other railroads.

Prior to 2002, the weekly coal production model converted AAR data into short tons of coal by using the average number of short tons of coal per railcar loaded reported in the "Quarterly Freight Commodity Statistics" from the Surface Transportation Board. If an average coal tonnage per railcar loaded was not available for a specific railroad, the national average was used. To derive the estimate of total weekly production, the total rail tonnage for the week was divided by the ratio of quarterly production shipped by rail and total quarterly production. Data for the corresponding quarter of previous years were used to derive this ratio. This method ensured that the seasonal variations were preserved in the production estimates.

Beginning in 2002, the weekly coal production model uses statistical autoregressive methods to estimate national coal production as a function of railcar loadings of coal, and heating degree-days and cooling degree-days. On Thursday of each week, EIA receives from the AAR data for the previous week. The latest weekly national data for heating degree-days and cooling degree-days are obtained from the National Oceanic and Atmospheric Administration's Climate Prediction Center. The weekly coal model is run and a national level coal production estimate is obtained. The weekly coal model is refit every quarter after preliminary coal data are available.

When preliminary quarterly data become available, the monthly and weekly estimates are adjusted to conform to the quarterly figures. The adjustment procedure uses State-level production data and is explained in EIA's *Quarterly Coal Report*. Initial estimates of annual production published in January of the following year are based on preliminary production data covering the first nine months (three quarters) and weekly/monthly estimates for the fourth quarter. The fourth quarter estimates may or may not be revised when preliminary data become available in March of the following year, depending on the magnitude of the difference between the estimates and the preliminary data. In any event, all quarterly, monthly, and weekly production figures are adjusted to conform to the final annual production data published in the *Monthly Energy Review* in the fall of the following year.

Note 2. Coal Consumption. Coal consumption data are reported by major end-use sector. Forecast data (designated by an "F") are derived from forecasted values shown in the U.S. Energy Information Administration (EIA) *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply and Demand: Base Case." The monthly estimates are based on the quarterly values, which are released in March, June, September, and December. The estimates are revised quarterly as collected data become available from the data sources. Sector-specific information follows.

Residential and Commercial—Coal consumption by the residential and commercial sectors is reported to EIA for the two sectors combined; EIA estimates the amount consumed by the sectors individually. To create the estimates, it is first assumed that an occupied coal-heated housing unit consumes fuel at the same Btu rate as an oil-heated housing unit. Then, for the years in which data are available on the number of occupied housing units by heating source (1973–1981 and subsequent odd-numbered years), residential consumption of coal is estimated by the following steps: a ratio is created of the number of occupied housing units heated by coal to the number of occupied housing units heated by oil; that ratio is then multiplied by the Btu quantity of oil consumed by the residential sector to derive an estimate of the Btu quantity of coal consumed by the residential sector; and, finally, the amount estimated as the residential sector consumption is subtracted from the residential and commercial sectors' combined consumption to derive the commercial sector's estimated consumption. The 2007 share is applied to 2008 forward, and the other missing years' shares are interpolated.

Industrial Coke Plants—Prior to 1980, monthly coke plant consumption data were taken directly from reported data. For 1980–1987, coke plant consumption estimates were derived by proportioning reported quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported. Beginning in January 1988, monthly coke plant consumption estimates are derived from the reported quarterly data by using monthly ratios of raw steel production data from the American Iron and Steel Institute. The ratios are the monthly raw steel production from open hearth and basic oxygen process furnaces as a proportion of the quarterly production from those kinds of furnaces.

Industrial Other—Prior to 1978, monthly consumption data for the other industrial sector (all industrial users minus coke plants) were derived by using reported data to modify baseline consumption figures from the most recent Bureau of the Census Annual Survey of Manufactures or Census of Manufactures. For 1978 and 1979, monthly estimates were derived from data reported on Forms EIA-3 and EIA-6. For 1980–1987, monthly figures were estimated by proportioning quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported on Form EIA-3. Beginning in January 1988, monthly consumption for the other industrial sector is estimated from reported quarterly data by using ratios derived from industrial production indices published by the Board of Governors of the

Federal Reserve System. Indices for six major industry groups are used as the basis for calculating the ratios: food manufacturing, which is North American Industry Classification System (NAICS) code 311; paper manufacturing, NAICS 322; chemical manufacturing, NAICS 325; petroleum and coal products, NAICS 324; non-metallic mineral products manufacturing, NAICS 327; and primary metal manufacturing, NAICS 331. The monthly ratios are computed as the monthly sum of the weighted indices as a proportion of the quarterly sum of the weighted indices by using the 1977 proportion as the weights. Prior to 2008, quarterly consumption data for the other industrial sector were derived by adding beginning stocks at manufacturing plants to current receipts and subtracting ending stocks at manufacturing plants. In this calculation, current receipts are the greater of either reported receipts from manufacturing plants (Form EIA-3) or reported shipments to the other industrial sector (Form EIA-6), thereby ensuring that agriculture, forestry, fishing, and construction consumption data were included where appropriate. Beginning in 2008, quarterly consumption totals for other industrial coal include data for manufacturing and mining only. Over time, surveyed coal consumption data for agriculture, forestry, fishing, and construction dwindled to about 20,000 to 30,000 tons annually. Therefore, in 2008, EIA consolidated its programs by eliminating agriculture, forestry, fishing, and construction as surveyed sectors.

Electric Power Sector—Monthly consumption data for electric power plants are taken directly from reported data.

Note 3. Coal Stocks. Coal stocks data are reported by major end-use sector. Forecast data for the most recent months (designated by an "F") are derived from forecasted values shown in the U.S. Energy Information Administration (EIA) *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply and Demand: Base Case." The monthly estimates are based on the quarterly values (released in March, June, September, and December) or annual values. The estimates are revised as collected data become available from the data sources. Sector-specific information follows.

Producers and Distributors—Prior to 1998, quarterly stocks at producers and distributors were taken directly from reported data. Monthly data were estimated by using one-third of the current quarterly change to indicate the monthly change in stocks. Beginning in 1998, end-of-year stocks are taken from reported data. Monthly stocks are estimated by a model.

Residential and Commercial—Prior to 1980, stock estimates for the residential and commercial sector were taken directly from reported data. For 1980-2007, stock estimates were not collected. Beginning in 2008, quarterly stocks data are collected on Form EIA-3 (data for "Commercial and Institutional Coal Users").

Industrial Coke Plants—Prior to 1980, monthly stocks at coke plants were taken directly from reported data. Beginning in 1980, coke plant stocks are estimated by using one-third of the current quarterly change to indicate the monthly change in stocks. Quarterly stocks are taken directly from data reported on Form EIA-5.

Industrial Other—Prior to 1978, stocks for the other industrial sector were derived by using reported data to modify baseline figures from a one-time Bureau of Mines survey of consumers. For 1978–1982, monthly estimates were derived by judgmentally proportioning reported quarterly data based on representative seasonal patterns of supply and demand. Beginning in 1983, other industrial coal stocks are estimated as indicated above for coke plants. Quarterly stocks are taken directly from data reported on Form EIA-3 and therefore include only manufacturing industries; data for agriculture, forestry, fishing, mining, and construction stocks are not available.

Electric Power Sector—Monthly stocks data at electric power plants are taken directly from reported data.

Note 4. Coal Forecast Values. Data values preceded by "F" in this section are forecast values. They are derived from the U.S. Energy Information Administration (EIA) Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The coal forecast relies on other variables as well, such as alternative fuel prices (natural gas and oil) and power generation by sources other than fossil fuels, including nuclear and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the coal industry.

The STIFS model results are published monthly in EIA's *Short-Term Energy Outlook*, which is accessible on the Web at http://www.eia.gov/emeu/steo/pub/contents.html.

Note 5. Additional Coal Information. The U.S. Energy Information Administration's *Quarterly Coal Report* provides additional information about coal data and estimation procedures.

Table 6.1 Sources

Production
1973–September 1977: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977 forward: U.S. Energy Information Administration (EIA), *Weekly Coal Production*.

Waste Coal Supplied
1989–1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."
1998–2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants."
2004–2007: EIA, Form EIA-906, "Power Plant Report," Form EIA-920, "Combined Heat and Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants."
2008 forward: EIA, Form EIA-923, "Power Plant Operations Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users"; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

Imports and Exports
U.S. Department of Commerce, Bureau of the Census, Monthly Reports IM 145 (Imports) and EM 545 (Exports).

Stock Change
Calculated from data in Table 6.3.

Losses and Unaccounted for
Calculated as the sum of production, imports, and waste coal supplied, minus exports, stock change, and consumption.

Consumption
Table 6.2.

Table 6.2 Sources

Residential and Commercial Total
Coal consumption by the residential and commercial sectors combined is reported to the U.S. Energy Information Administration (EIA). EIA estimates the sectors individually using the method described in Note 2, "Consumption," at the end of Section 6. Data for the residential and commercial sectors combined are from:

1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*.
January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."
October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."
1980–1997: EIA, Form EIA-6, "Coal Distribution Report," quarterly.
1998–2007: DOI, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production."
2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users" (data for "Commercial and Institutional Coal Users"); and, for forecast values, EIA, Short-Term Integrated Forecasting System.

Commercial CHP
Table 7.4c.

Commercial Other
Calculated as "Commercial Total" minus "Commercial CHP."

Industrial Coke Plants
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1980: EIA, Form EIA-5/5A, "Coke and Coal Chemicals—Monthly/Annual Supplement."
1981–1984: EIA, Form EIA-5/5A, "Coke Plant Report—Quarterly/Annual Supplement."
1985 forward: EIA, Form EIA–5, "Coke Plant Report—Quarterly"; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

Other Industrial Total
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report—Manufacturing Plants."
1980–1997: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants," and Form EIA-6, "Coal Distribution Report," quarterly.
1998-2007: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants," Form EIA-6A, "Coal Distribution Report," annual, and Form EIA-7A, "Coal Production Report," annual.
2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users," and Form EIA-7A, "Coal Production Report," annual; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

Other Industrial CHP
Table 7.4c.

Other Industrial Non-CHP
Calculated as "Other Industrial Total" minus "Other Industrial CHP."

Transportation
1973–1976: DOI, BOM, *Minerals Yearbook*.
January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."
October–December 1977: EIA, Form EIA-6, "Coal Distribution Report," quarterly.

Electric Power
Table 7.4b.

Table 6.3 Sources

Producers and Distributors
1973–1979: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), Form 6-1419Q, "Distribution of Bituminous Coal and Lignite Shipments."
1980–1997: U.S. Energy Information Administration (EIA), Form EIA-6, "Coal Distribution Report," quarterly.

1998–2007: EIA, Form EIA-6A, "Coal Distribution Report," annual.
2008 forward: EIA, Form EIA-7A, "Coal Production Report," annual, and Form EIA-8A, "Coal Stocks Report," annual; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

Residential and Commercial
1973–1976: DOI, BOM, *Minerals Yearbook*.
January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."
October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."
2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users" (data for "Commercial and Institutional Coal Users"); and, for forecast values, EIA, Short-Term Integrated Forecasting System**.**

Industrial Coke Plants
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys.*
October 1977–1980: EIA, Form EIA-5/5A, "Coke and Coal Chemicals—Monthly/Annual."
1981–1984: EIA, Form EIA 5/5A, "Coke Plant Report—Quarterly/Annual Supplement."
1985 forward: EIA, Form EIA-5, "Coke Plant Report—Quarterly"; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

Industrial Other
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report—Manufacturing Plants."
1998–2007: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants."
2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users"; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

Electric Power
Table 7.5.